## ABSTRACT OF THE DISCLOSURE

The present invention provides a transformed cell in which a polynucleotide having a nucleotide sequence encoding an amino acid sequence of an osmosensing histidine kinase having no transmembrane region is introduced in a functional form into a cell deficient in at least one hybrid-sensor kinase, a method of assaying the antifungal activity of a test substance using the transformed cell, and a method of searching an antifungal compound using the method, and the like.